THE MAGICAL HAZEL TWIG.

A SCIENTIFIC STUDY OF THE DIVINING ROD.

PROFESSOR W. F. BARRETT CONFIDENT THAT ITS INDICATIONS ARE OFTEN CORRECT, BUT THAT THE OPERATOR, AND NOT THE ROD, MAKES THE DISCOVERY.

The notion that you could detect the existence and position of a stream of water flowing underground at a depth of a hundred feet or more by the peculiar behavior of a hazel twig held in your fingers has been looked upon in modern times as a ridiculous superstition. And any one who seriously maintained that there was even a little foundation in fact for such a belief exposed himself to the suspicion, if not the charge, that he was a "crank." Scientific people, and particularly the geologists, have discredited all stories of this sort so long and so decidedly that other folk have been ashamed to evince faith in them.

Now, however, a professor of physics in the Royal College of Science for Ireland, approaching the subject with a distinct prejudice antagonistic to the theory, has been led to change his mind by an extended investigation. His name is W. F. Barrett, and the sub-title of the treatise in which is embodied the result is "A scientific and historical research as to the existence and practical value of a peculiar human faculty, unrecognized by science, locally known as dowsing."

The first great step in this work was to collect all available narratives in regard to the use of the divining rod. The next one was to sift these, like testimony in court, by corresponding with disinterested witnesses and finding out how far the original statements could be substantiated. In a few instances the investigator got hold of a person who was said to possess the faculty of finding water with the aid of a twig or similar device, and himself experimented with the "dowser."

In time Professor Barrett was confronted with an amazing quantity of evidence. Scores, if not hundreds, of these tales are given in his treatise. Here are three samples: A sanatorium was to be built on high ground in Somersetshire, England. The site was apparently a dry one. Three professional "dowsers" were sent for separately, each unknown to the others, and each working under the conviction that he alone was employed. All three pointed to the same spot. A well was sunk there, and abundant water was found. William Ward Spink, a justice in British Columbia, walked about over his own grounds for an hour, blindfolded and carrying a divining rod in his fingers. Every time the wand dipped an attendant drove a peg into the earth. In many cases the justice would pass over a spot where the rod had moved before, and it would invariably give the same sign again. He dug wells at only two of the places indicated, but got water in both. This man declared that if he stood over a garden hose with a divining rod in his fingers he could tell by its conduct when the water was turned on and off. At Newport, Monmouthshire, a well was sunk to a depth of fifty-one feet without success. Local experts, noting the character of the soil, then pronounced the quest hopeless. A Cornishman, who was present, advocated a trial of the divining rod, with which his boy, aged eleven, had had some successful experience. The lad was sent for. In his hands the twig gave distinct signs. But the people who would have to pay for the excavation were sceptical and hesitated. The Cornishman offered to take the contract himself, and stipulated that he would demand no pay if no water was found. The job proceeded on that basis. At a depth of forty-eight feet the diggers struck a gushing vein, and were obliged to flee for their lives.

Among the numerous amateur "dowsers" of whom Professor Barrett has heard is Lady Milbanke, mother-in-law of Lord Byron. Having witnessed performances with the divining rod by a peasant during a visit to Provence in 1805 she took the twig into her own hands, and was startled by the discovery that it behaved for her exactly as it did for the Provençal. Two years later she was staying with the wife of a nobleman in Huntingdonshire, and her hostess was bewailing the failure of efforts to find a suitable supply of water for a dairy. Thereupon Lady Milbanke obtained some hazel twigs, walked over the ground, located a well for her host and hostess in their presence, and had the satisfaction of learning that a fluent spring was struck in consequence of her advice.

The record of several professional users of the divining rod is given in brief by the Irish investigator. W. Scott Lawrence, of Bishopston, Bristol, was for twenty-one years a church warden; a fact, presumably, affording some indication of his character for honesty and veracity. For sixty years he had a reputation as a water finder, although his regular occupation was that of a stone merchant. Over a hundred persons testified that Lawrence found wells for them.

John Mullins, of Colerne, Chippenham, Wiltshire, practised the art of dowsing for gain for thirty years, and made it a rule not to accept pay unless he found water by means of the divining rod. On one occasion, at Waterford, the Diamond Boring Company had gone to a depth of one thousand feet without success. Mullins was called in, agreed to find water at a depth of ninety feet or less, and reached it at eighty-four feet down. An American dowser, Cyrus Fuller, of Plymouth, Wayne County, Mich., who died in 1863 at the age of eighty-five, enjoyed the highest reputation for integrity and truthfulness. He is credited with having found two hundred wells, and, unlike most other experts of his class, is said never to have experienced a failure.

In two instances mentioned by Professor Barrett hidden coins were found, apparently through the guidance of the forked twig. But in a later volume he will go into the matter of discovering minerals and oil in this manner more fully than was deemed advisable in this essay.

The typical divining rod is shaped somewhat like a wishbone, and is about a foot long. The tip of one prong is held in each hand, and the hands are kept eight or ten inches apart. The elbows are usually in contact with one's sides, and the forearms extend straight forward, horizontally. The twig itself stands almost vertically in front of the dowser's chest. In the majority of cases reported the upper part of the rod swayed toward the operator's body; but in a few instances it moved in the other direction, namely, downward toward the earth. The violence of the movement seems to vary greatly. If the twig was so held that it could move freely it would, perhaps, revolve on an imaginary axis extending from one hand to the other. It is related that on some occasions, when the twig could not revolve, it would be badly twisted and bent and would even be broken. Much variety is discernible in the accounts, both as to the way of grasping the rod and the latter's behavior.

Twigs from other trees than the witch hazel worked equally well in some hands. And a curious lot of substitutes have been employed. Among these are an aluminum bow, a flat steel wire bent like a horseshoe, a pair of tongs and a long German sausage! Lolcester Gataker, of Bath, England, practised the art without any of this apparatus, merely holding his open hands out in front of him, palms downward, much as one would warm his hands over a low stove. The sensations which different dowsers report are rather diverse. Some operators say that they feel a slight tingling in their hands or bodies when they find water with a divining rod. Others pretend to experience a severe shock. Discomfort, approaching nausea, affects the stomach sometimes. Several professional operators say that the work is exhausting, especially to a person advanced in years, and they have been seen to reel and totter while conducting a search.

Although Professor Barrett doesn't attempt fully to explain these phenomena, he has clear convictions on one point. He is confident that it is the operator, not the rod, that discovers the water. The movement is not due in genuine cases, he believes, to any attraction or repulsion exerted upon the twig (or the substitute therefor) by the hidden stream, but to muscular action, exerted unconsciously in response to some inward inspiration. Some psychologists have been accustomed of late years to assign many human sensibilities and activities to a part of the spiritual nature that lies below the level of consciousness, and which they call the "sub-conscious self." "Sub-liminal" is another common name for it. Professor Barrett is inclined to think it possible that the faculty which some people seem to possess of finding water and metals in the manner described resides down in the "sub-liminal," but further investigation is necessary, he admits, to establish that theory.

OLD FLEETWOOD—CLUBHOUSE, JUDGES' STAND AND TRACK FROM GRANDSTAND.

FLEETWOOD'S GLORY GONE.

THE FAMOUS DRIVING PARK TO BE CUT THROUGH BY STREETS.

SOME OF THE FAMOUS MEN WHO HAVE FREQUENTED THE TRACK IN YEARS GONE BY—NOTED HORSES AND THEIR RECORDS AT FLEETWOOD.

Among the landmarks which the development of the northern part of the metropolis will obliterate is Fleetwood Driving Park. It has been a favorite meeting place for lovers of horses for many years and a track where some of the most famous horses have won their laurels. The park had been a popular resort for owners of trotting horses for many years when, in 1881, the Driving Club took possession of it. From that time until within a few years ago all the representative horse-fanciers of New-York City were identified with the park, and it was the recognized rendezvous for horsemen, the place to see horses and hear all the news about them.

Among the first members of the club to take an interest in the driving park were Alexander Taylor, Sheppard Knapp, William H. Vanderbilt, Frank Work, T. C. Eastman, Robert Bonner, Foster Dewey and David Bonner.

In 1882 the membership had grown beyond the expectations of the organizers of the club and included the names of William H., Frederick and Captain Jacob Vanderbilt, W. F. Connor, George Allen, Samuel Barton, A De Cordova, John R. Fellows, C. P. Morosini, Jordan L. Mott, Brayton Ives, William Rockefeller, Nathan Straus, W. S. Webb, William C. Whitney, H. M. Flagler, M. B. Brown, Lawson N. Fuller, W. H. Harbeck, and hundreds of other men who were owners and admirers of good horses.

Fall and spring meetings were held, at which notable horses were driven by owners and by professional drivers. Between seasons there was always much private speeding and many matches against time. The veranda of the modest little hotel which overlooks the track was the meeting place of the patrons of the park, and there, away from the bustle of business and the worry of politics, men found recreation and pleasure in discussing horses and watching drivers in their efforts to produce the best effects with the horses in their charge.

The driving park was so popular with men of prominence that when it was proposed to cut it up and lay out streets within the inclosure

OLD FLEETWOOD A SHADY DRIVE TO THE TRACK.